

NATURE DISPLAYED,

I N

L E T T E R S,

B E I N G A

C O N T I N U A T I O N O F T H E S A M E W O R K

I N

C O N V E R S A T I O N S

B E T W E E N T H E

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Spēctacle de la Nature :

O R,

NATURE DELINEATED,

I N

CONVERSATIONS AND LETTERS

PASSING BETWEEN THE

CHILDREN OF A FAMILY.

IN THREE VOLUMES.

V O L. III.

London:

Printed and Sold by JOHN MARSHALL and Co. at No. 4,
ALDERMARY CHURCH YARD, in BOW-LANE.

E R R A T A.

*Page 89, line last but two, for learning read treating.—Page
107, line 6, for actuated read educated.*

DEDICATION.

T O

MRS. WORTHY.

THE excellent and amiable Mother, who just appears on the stage among her young people, in the Second Book, may, perhaps, not know her own person.

But, however her modesty may prevent the discovery to

A 3 her-

herself ; I expect that her intimate Friends will perceive the resemblance of the phantom which I have raised.

Yet, should there be *many* Mothers conjectured to have furnished the model ; should there be *many* found so solicitously attentive to their Children, so capable of improving their minds, as I would intimate my Patroness to be ; I shall rejoice at the circum-

(vii)

circumstance, and gladly
leave my DEDICATION among
the Goddeffes, to be con-
tended for, inscribing it

T O

THE BEST.

WRI-

W R I T E R S.

JAMES WORTHY, and
EDMUND WORTHY, are sup-
posed to be at School together.

JEMIMA WORTHY, at Home,
or on a Visit.

GILBERT WORTHY, at a Nur-
fery-School.

WALTER WORTHY, on a
Visit to his Uncle, Mr. MARSH.

P L U M E, about the age of the elder
Boy, assists him in copying, &c.
He is supposed to be the Orphan of
a Writing-Master, left destitute, and
kindly received into the Family
of Mr. WORTHY, whose Sons he
accompanies to School.

CON-

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LETTER I.

JAMES WORTHY *to his* SISTER.

DEAR SISTER,

I HAD no doubt of your sisterly affection; I was confident of your receiving pleasure from my Letters; I was well aware of the partiality with which you would peruse the product of a Brother's pen; yet the Letter in which you assure me of these truths, transports me with joy.

Edmund rejoices, that we gratified our own impatience and yours at the same time. He insists, that we must continue to write, occasionally, some account of our amusive studies; and actually declined

~~clined engaging in a party for cricket this~~
 afternoon, to gain an opportunity of
 transcribing something for your enter-
 tainment. He would neither deprive
Plume of the diversion, by employing his
 pen, nor retard your pleasure.

You are uncommonly interested, you
 say, because you love the writers. Now,
 my dear *Femima*, you read—you re-
 member—you have leisure—what in-
 ference do you draw?—Should not we
 be as well pleased to receive some account
 of the books which you read, for the
 same reason?

Edmund's vivacity scorns all methodical
 description: nothing, he says, can be so
 dull as your measures and weights; and
 these particulars, for some time, deterred
 him from reading an Author, whom he
 has now discovered to be almost as
 sprightly as himself in some of his de-
 scriptions.

scriptions. But here he comes: accept a
hasty adieu from

J. WORTHY.

EDMUND WORTHY, *in continu-
ation.*

I have snatched the pen from *James*, to
vindicate myself. I know he was going
on to tell you, that you must place to
the account of my giddiness, all omis-
sions. Now I will not hinder him from
telling you, that such a bird weighs so
many ounces, and measures so many
inches; but allow *me* to acquaint you
with its nature and peculiar manners;—
and what does it signify to you, whether
the *said* bird be the size of a humming-
bird or an ostrich? Whilst these serious
particulars are adjusted, you yawn—and
the time allotted for amusement is flown.

We have many jocular disputes upon this subject; and if I did not come off victorious, you would scarce receive a sheet of paper in a month. But my Brother will not suffer me always to forestal him—so he condescends to send you a hasty production, because I do. Now, you see you have double obligation to me; for I not only write myself, but spur on one who does it better.

Allow me to join in the request offered by my Brother. You have much more time than we have. Whilst we learn the *Latin* names for the different objects, you can amuse yourself with reading the history of their modes of life, with a long list of entertaining particulars.

Duty and love from *James*, and

Your affectionate Brother,

EDMUND WORTHY.

LET.

LETTER II.

Miss WORTHY to her BROTHERS.

DEAR BROTHERS,

YOU wrote to me in partnership, so I address you together. I thank you both for my Letter. May your disputes always be of that endearing kind, which shall contrive to oblige a Sister most ; and may they be always conducted in the same amicable manner !

But now I want to whisper in *Edmund's* ear—Did my Mama tell you, that I had a design of sending you a packet soon ? I meant to surprise you.

My Mama does not approve of my writing much. I was lamenting that my fingers were not as nimble as my tongue.

or I would make you partakers in my pleasures. Would you believe it? Miss *Friendly* was so very obliging as to offer herself as my secretary, whilst she stays at *The Grove*. We are afraid she will leave us soon.

So now my secret is out.—My Papa and Mama approve of our studies; and my Mama just mentioned *Walter*—as if she meant to hint, that he would be pleased to read some of your morsels of Natural History. *Le sage entend à demi-mot*. I throw the hint and the proverb between you: they are at the service of both, as well as the sincere affection of

Your Sister,

JEMIMA WORTHY.

LET.

LETTER III.

Miss WORTHY to JAMES WORTHY.

DEAR BROTHER,

I F you have thought the few days that I have passed since my last letter, long—it is no more than I have done. My impatience would not allow me to refrain from making you a promise, the performance of which did not depend entirely upon myself.

I inclose what Miss *Friendly* has been so kind to copy for me, as I dictate from memory.

I hope to receive intelligence of your studies soon, and of dear *Edmund*.—Present love to him from,

Dear Brother,

Your affectionate Sister,

JEMIMA WORTHY.

" The FLYING FISH,

" About the size of a Herring, has long
 " fins, which, when it is at a disadvan-
 " tage in swimming, enable it to rise and
 " flutter over the surface of the water,
 " two or three hundred yards. All na-
 " ture seems combined against this poor
 " little fish: it needs double powers of
 " escaping, as it is exposed to double
 " dangers; for when it has escaped from
 " those of the water, it finds enemies on
 " the wing, ready to seize upon it.

" The Dorado pursues the Flying Fish
 " in the water; and as soon as it rises, to
 " avoid this enemy, the Tropic Bird and
 " Albatross are watching to catch it. It
 " seeks refuge again from these new ene-
 " mies—and whole shoals of them fall
 " on shipboard. I have seen them dried."

LETTER IV.

EDMUND WORTHY *to his* SISTER.

DEAR JEMIMA,

WE come to devour your poor little harmless Fish. I am a DORADO.

" The DORADO,

" In tropical climates, is six feet long.

" It is beautiful, being enamelled with

" spots of blueish green and silver, with

" the tail and fins of a gold colour.

" The tints are all brilliant. The eyes

" are large and fine, surrounded with

" circles of shining gold.

" The Fish is always in motion—

" always pursuing or pursued—defend-

“ing itself from the Shark, or darting
“after the smaller fishes.”

My Brother has limited me, having a
large sheet for the frank.

Adieu ! says

Your affectionate Brother,

EDMUND WORTHY.

LET-

LETTER V.

JAMES WORTHY *to his* SISTER.

YOUR Fish, *Jemima*, was a delicate morsel, and well dressed. I thank you for it. *Edmund* says, he swims after you in the form of a Dorado, and I am the voracious Shark in pursuit of him.

" The SHARKS

" Are from twenty to thirty feet long.

" The size will lead you to believe the

" possibility of one being found with a

" human corpse in his belly; and their

" fondness for human flesh makes it

" probable, that such a horrid circum-

" stance may not be very unusual. The

" mouth is said to be capable of re-

" ceiving a man with ease. It has great

"goggling eyes. The skin is hard,
 "rough, and prickly; of it is made
 "shagreen. The upper jaw projects so
 "much beyond the lower, as to oblige
 "the fish to turn on his side when he
 "goes to seize his prey: thus some escape
 "from his horrid jaws, armed with six
 "rows of teeth, which he can erect or
 "depress at pleasure."

Do you recollect a beautiful ballad, in
Percy's Collection, called *Bryan and*
Peerene?—If you begin to yawn over my
 dull description, those pleasing lines will
 rouse you from your lethargy, to tender
 sympathy.

Let me hear from you. I thank you
 for your kind hint respecting *Walter*.
 You are ever obliging

Your affectionate Brother,

JAMES WORTHY.

LET-

LETTER VI.

JAMES WORTHY *to* WALTER
WORTHY.

DEAR WALTER,

THOUGH you are at present out of sight of all of us, you are not out of our mind : we all think of you with affection. If I could “wast a thought” with wishing, you should be assured of this much oftener than my employments will allow.

I want to hear a great deal about you. Suppose me to have made a hundred enquiries, and answer them. You do not want readiness in any thing—and were far from deficient in finding questions when I saw you last ; so pray let yourself

yourself to work, to imagine what I should wish to know ; and tell me——

But how ?—Are you sufficiently master of your pen to be indulged in letter-writing ?

Edmund and I find "time indeed more
"valuable than gold." I wish it were as
capable of being extended. We could
pass the whole day at our books of
amusement—or the whole day in col-
lecting plants—or the whole day in ad-
miring insects—or the whole day—but,
alas ! this precious time keeps flying—
our presence will soon be required in the
school, to repeat—and I feel that I could
gladly pass the whole day in writing to
you—nor can I lay my pen aside till it
has assured you, that I am,

My dear *Walter*,

Your affectionate Brother,

JAMES WORTHY.

P. S.

P. S. I inclose a little specimen of our amusement : it is extracted from books of Natural History. I chose that for you, because you have read a fable that speaks of a Fox, as eating a Crab—and the common Crab, you know, is generally out of the reach of a Fox.

"The VIOLET CRAB

"Has teeth like scissars—and nippers :
 "it will lose its limb sooner than quit its
 "grasp—and has been seen scampering
 "off, after it has left its claw still hold-
 "ing. The loss, however, is not irre-
 "parable ; for it grows again, as in the
 "common Lobster. The Violet Crabs
 "have their retreats in the mountains,
 "whence they march annually down to
 "the sea-shores in vast numbers. Scarce
 "any thing stops them. When they are
 "terrified, they march back in a disor-
 "derly

" derly state, clattering their nippers in
 " a threatening manner. Sometimes they
 " will tear off a piece of skin, and leave
 " their weapon where they inflict the
 " wound. If one be maimed, the rest
 " will devour it. They go where the sea
 " washes over them, but return to land
 " to lodge, seeking the shore in the day,
 " They shake their spawn into the water,
 " and leave it to accident. The eggs
 " hatch under the sand; and soon after
 " millions of little Crabs quit the shore,
 " and slowly travel up the mountains.
 " The old ones stay in the flat country to
 " recover, making holes in the earth,
 " and covering themselves with leaves and
 " dirt. There they throw off their old
 " shell, and are naked some time: then
 " they are fat, and delicious food. In
 " *Jamaica*, they are esteemed a delicacy."

LET-

LETTER VII.

WALTER WORTHY, *in Answer.*

DEAR BROTHER,

I MUST be contented to thank you in few words, for your Letter; for I write by deputy. But I hope I shall soon be able to write short Letters myself; and then I will tell you as much as my Aunt gives me leave—for she says, that, if I scrawl long Letters now, I shall spoil my hand.

My Aunt designs to write to you herself; and she is so good to be my secretary: so my Letter must finish before her's can begin. I am, dear Brother,

Your affectionate

WALTER WORTHY.

LET.

L E T T E R VIII.

Mrs. MARSH to Master WORTHY.

DEAR JAMES,

I DO not know which of us was most pleased with your Letter, my nephew or myself.

Walter is an inch taller, at the commencement of a correspondence with his dear Brother. I am truly rejoiced to find that your leisure hours pass so innocently, so agreeably, and, let me add, so profitably ; for you are laying a foundation for future researches into the Book of Nature ; a book that you will never be tired of studying, if you acquire a taste for its beauties in early life.

I approve your motive of choice in selecting the Crab : it gave rise to some

learned

learned disquisitions between my little pupil and myself.

Walter remarked, that the Fox was made to eat Grapes, in *Æsop's Fables*—Do you know, that Dogs (whose nature, in a wild state, much resembles that of the Fox) will actually eat fruit?—And travellers assert, that the laws of those countries where Grapes are cultivated in great abundance require, that Dogs should be confined till after the vintage, lest they should injure the vineyards.

These things teach us, that we ought to be cautious how we censure an Author, without a thorough knowledge of the subject he writes upon.

You will give love to dear *Edmund*, from your Uncle, and from,

My dear *James*,

Your affectionate Aunt.

LET-

LETTER IX.

EDMUND WORTHY to WALTER
WORTHY.

DEAR WALTER,

YOU have been treated with a delicacy by *James* ; and since he cannot love you better than I do, I know not why I should not have the pleasure of serving up a little dish for your entertainment.

His was a shell-fish : so is mine.

His was a Crab : so is mine.

But our Crabs differ in this : His is esteemed an agreeable repast : mine will only regale your mind.

The SOLDIER CRAB
Is described by writers as “ descending
“ from

" from the mountains, annually, to place
 " its young, and procure a new house
 " for itself; that is, to deposit its
 " spawn, and provide for itself a new
 " shell; for it has no shell upon its tail,
 " but inhabits empty shells; and when it
 " has outgrown its old habitation, it
 " seeks for a larger."

I laughed when I read the account;
 for it is said to " drag its old house at its
 " tail, till it has found one that suits it;
 " —to try the new one; and, if it do
 " not find that convenient, to return to
 " the old one; prudently, never quitting
 " the old habitation, till it is secure to
 " be better supplied.

" Sometimes battles arise between two
 " Soldiers who have both fixed their
 " choice upon the same house.

" It is supposed that they scatter their
 " spawn in little shells that are dispersed
 " about

"about upon the shore: so, perhaps,
 "that may be their employment when
 "they are imagined to be making trial
 "of a shell."

I once saw one in a Whelk-shell alive:
 it was at *Harwich*, where the common
 people call them Wrong-Heirs. My
 Uncle has *Pennant's "British Zoology:"*
 you may find an account there—and like-
 wise in "*Nature Delineated*," where I
 think it is called the *Hermit*—perhaps,
 from living in a cell.

I have not time to say more, than that
 I am

Your affectionate Brother,

EDMUND WORTHY.

L E T

LETTER X.

Miss WORTHY to her BROTHERS.

DEAR BROTHERS,

I CANNOT think of separating you, when I am to tell you what a charming little boy I find our Brother *Walter*.— I direct to *James* ; but I beg my Letter may be supposed to be addressed to all three of you.

I wonder when *Gilbert* will think he can write well enough to venture to send a Letter.

Walter is very forward in every thing : he is fond of reading and writing : in short, he takes delight in learning whatever is thought proper for him to learn.

I have

I have so many things to say to you, that I do not know which to say first; and dear *Walter* begs that I would write a little for him.

My Uncle has lent my Mama a book that is just translated from the *Latin* (oh! why was not I a boy, to learn *Latin*?): it is all upon Natural History, she says, but not all suited to me: so I never look in it, but when she gives me a chapter to read to her; and she is sometimes so kind as to read a passage aloud to me.

There is a long account of Serpents, very curious, I think;—and a very long account of the Rhen-deer, a part of which my Aunt read to us;—and she told me, that she somewhere met with a remark, that the name implies *swiftness*. And there is a great deal of history of Insects—just giving you (as Miss Clark called

called it) the outlines of their manners.

I am called down to attend some company who have brought a young lady with them; so poor *Walter's* Letter is vanished, and mine must be curtailed.

Love to all, from,

Dear Brothers,

Your affectionate Sister,

Fawnton.

JEMIMA WORTHY.

L E T T E R XI.

JAMES WORTHY to his SISTER,

DEAR SISTER,

I BELIEVE I may assure you, we were all much pleased with your Letter—I will answer for one being delighted.

I long to see *Walter*—is he much grown?

The book you mention, I believe, *must* be a translation from “Select Dissertations,” published in *Sweden*. If it be, I once saw it for a short time—and was sorry the time was so short. Has it a Paper upon the Silk-worm? That I mention, has. You may look at the title-page, doubtless: it is there called, “A Supplement to Mr. *Stillingfleet*’s Tracts relating

relating to Natural History," if it be the same book that I mean.

I should like to receive some extracts from it, when you are at leisure, if my Mamma approve it.

Edmund is too busy to write. Pray tell *Gilbert*, that I shall expect him to begin writing to us soon. Does he delight in the study of Natural History? If he do, it is time he should enter into partnership, and furnish his portion of entertainment.

Excuse a hasty conclusion. Duty and love from,

My Brother's and yours affectionately,

JAMES WORTHY.

L E T T E R XII.

Miss WORTHY *to her* BROTHER
JAMES.

DEAR JAMES,

I WRITE so soon again, because I am impatient to tell you, that this book that I am so eager after, *is* the book which you supposed; and I find it was from this that you took some particulars respecting the Silkworm, which you were so kind as to give me.

It was translated by a Clergyman. The language is said to be bad: he is blamed for sending any thing to the press so incorrect, and so carelessly done: but I must ever thank him for supplying me
with

with a great deal of information and entertainment ; and perhaps he had not leisure to revise it. My Mama does not choose I should have the book in my possession ; so I cannot give you any extracts, unless she should indulge me in copying with her.

We are going out this morning ; so that I have no time to write more, than that we are all well, and most affectionate towards you. Believe

Your affectionate Sister,

Fawntan.

JEMIMA WORTHY.

LETTER XIII.

Miss WORTHY to her BROTHER.

DEAR EDMUND,

I BROKE off abruptly the last time I was writing to you. We were going to pay a morning visit to Mrs. Thompson. My Aunt had told me, that there was a young lady but a little older than I am ; so I was thinking how we should amuse ourselves together. How do you suppose I found her employed ? Reading.—Now guess what ? *Shakespeare*. My Aunt says, they might as well put a *Greek* book in her hands ; that she might be taught to read it with as much propriety—and to enter just as much into the spirit of the author.

author. These were my Aunt's words to my Mama, as we returned.

There passed some conversation about books, whilst we were at Mrs. *Thompson's*.

My Mama and Aunt were of opinion, that reading what we cannot perfectly understand, was not merely loss of time, but really hurtful.

My Aunt says, it leads girls to conceit : they learn to talk of authors by rote ; to imagine, that they are already acquainted with passages, the beauty of which they never will be able to feel.

You will guess, that I am repeating pretty nearly the words that passed.

Miss *Thompson* and I walked into the garden ; and she discovered so much ignorance about every thing around us, that I pitied her Mama's mistaken notions. Had she read Mrs. BARBAULD'S Lessons a few years since, she would have
been

been acquainted with the origin of the Butterfly, whose beautiful painted wings I was admiring, whilst she repeated lines from *Shakespeare*, which she probably understood as little of as I did.

I could have added to my Aunt's list of evils ensuing on the occasion, that of *affectation*.

How happy are we, that we are directed in our choice of books, and of amusements! I pity Miss *Thompson*. I hope I have not expressed myself improperly in speaking of her. I am, &c.

JEMIMA WORTHY.

LET-

L E T T E R X I V .

Master WORTHY *to his* SISTER.

DEAR SISTER,

I AM sorry I can only write a few lines. Poor *Plume* is very ill ; and I am not only deprived of his assistance, but my time is very much taken up in attendance upon him.——Poor fellow ! he seems to relish nothing from the hand of any person but *Edmund* or me.——

Let me hear from you.——

Pray give our love and duty.——

You must not expect Letters from us at present ; for every moment we have of
leisure

leisure from our exercises, will be devoted to *Plume*.—Believe me

Your affectionate Brother,

JAMES WORTHY.

P. S. We shall be at leisure to read your Letters.

LET-

LETTER XV.

Miss WORTHY to her BROTHER.

DEAR BROTHER,

I AM sorry to be deprived of your correspondence—but more sorry for the cause. I hope poor *Plume* is not in danger—and that he will not long be so ill as to interrupt your proceedings.

My Mama and Aunt have given me such assistance, that I am able to send you some very agreeable Extracts from the “Select Dissertations.”

Thus they manage for me:

We read together, and mark with a pencil such passages as they think will suit for me to copy; and my Aunt sometimes is my secretary, as you will see.

All

(36)

All here send love to you and *Edmund*.
Believe me, dear Brother,

Your affectionate Sister,

JEMIMA WORTHY,

(*Inclosed*)

EXTRACTS

FROM

SELECT DISSERTATIONS.

" THE Divine Being has ornamented
" the world with so many proofs of his
" wisdom, that it is impossible to enu-
" merate them. He has imposed a ne-
" cessity of labour and industry upon
" man, that, by tracing his footsteps,
" and thus acquiring the knowledge of
" created things, he might form an idea
" of their Author—at the same time that
" he sought out and acquired what was
" necessary

" necessary for his daily food, and those
 " things which were calculated to supply
 " his other wants.

" Nature has reserved many
 " discoveries for posterity, that men of
 " every age may trace new marks of the
 " Divine Wisdom, and their sentiments
 " of piety and gratitude may go on per-
 " petually increasing. If the scrutiny of
 " Nature be matter of *curiosity* only—it is
 " certainly a curiosity worthy of man,
 " and which holds a place in his first
 " and most sacred duties.—Those who
 " carry their enquiries into the most con-
 " secrated recesses of Nature, must be
 " penetrated by a more felt admiration
 " of the wisdom and goodness of God.
 " If we consider the nature of man, and
 " external things, we shall discover, that
 " the final cause of his existence was the
 " contemplation of those objects he sees

" around him—that he might trace the
 " footsteps of the Divine Power and
 " Goodness; and, with the most assidu-
 " ous contemplation, note, examine,
 " and admire them. Else, for what end
 " has the Supreme Being raised him with
 " so many excellent endowments above
 " the animal creation, whose dignity is
 " lost in him who lives unknowing of
 " himself, and negligent of his Cre-
 " ator * ?"

* Let Man study Nature, her œconomy and
 police, not only for the purposes of gain, but
 for the pleasure and virtue which are inspired
 by the goodness of God to Man.

LET-

LETTER XVI.

Miss WORTHY *to her* BROTHERS.

DEAR EDMUND,

I DIRECTED my last Letter to *James*, so this shall be addressed to you—though I always mean you to receive my Letters in partnership.

I spend my time very agreeably. My Aunt has produced her microscope; and we could be amused all the day, if each day were as long as ten.

Papa condescends to join us; and Mama, you know, is generally one of the party. My Uncle smiles to see us so busy and happy; but his studies are of a different kind.

You liked my Extracts:—they were

a sort of introduction, you see:—but just now the microscope employs us so much, that you must excuse me from giving you many Extracts.

We yesterday saw an Insect out of a Sheep's Liver. "See (said Papa) the frugality of Providence! Nature, we are told, does nothing in vain. This creature lives entirely in a dark recess, where sight would be useless—and it has no eyes."—This Insect is the cause of a disorder in the Sheep, which kills abundance of them; and they are afflicted with it when they drink stagnant water. Sea-salt is said to be a remedy to the Sheep. The learned name is *Fasciola Hepatica*.

We have viewed a thousand things since the microscope has been produced.

I am delighted—Walter jumps—and Bernard is wild with joy: he really
enters

enters with as much glee into our studies, now, as any one of the family.——

Pray send the inclosed Letter to *Gilbert*, when you have an opportunity.

Believe me, dear Brothers,

Your affectionate Sister,

Fawnton.

JEMIMA WORTHY.

LETTER XVII.

WALTER WORTHY *to* GILBERT.

DEAR GILBERT,

I AM indulged in the pleasure of writing a few lines to you myself, as a reward for writing my copy very well.

I wish you were here. We have got a microscope—and we see such beautiful things! We are always peeping about for dead Insects, that we may see the limbs in the glass; and sometimes we can catch a live one, and manage to see it between two glasses. We were so lucky yesterday, as to tempt a Fly, with some sugar, to stand still for us to see him. I am sure he was not better entertained

tained with his meal, than we were with the sight of him eating it.

My Mama says, my pen goes too fast: she tells me, that I have written enough. I wish——but I recollect, “a ready and cheerful obedience is the whole duty of a child.” Mama, I throw down my pen at once. Adieu!

Fawnton.

WALTER WORTHY.

L E T T E R XVIII.

MRS. WORTHY to her SONS.

MY DEAR BOYS,

I AM pleased at your choice of amusements in your hours of leisure: they cannot be better employed than in examining and admiring the works of God. You find we are as busy here, in the same way. *Jemima* and the two Boys are indefatigable in their search for subjects. The *animalculæ* in liquids are favourite objects, because they can be viewed in their native element, alive and brisk.

SWAMMERDAM, a *Dutchman*, who was a very famous Naturalist, dissected the heart of a Bee. I think he fell a victim to his pursuits. Your Papa read to us a
passage

passage from a work of his, which, he said, was not suited to me or the children; so I had only this *taste*—which shews what a pious man the Author was.

Speaking of the Butterfly, when freed from its *Aurelia* skin, he says,

“ We see a little insignificant creature,
 “ distinguished in its last birth, with qua-
 “ lifications and ornaments which Man,
 “ during his stay upon earth, can never
 “ hope to acquire.

“ The Butterfly, to enjoy life, needs
 “ no other food but the dews of heaven,
 “ and the honeyed juices which are dis-
 “ tilled from every flower.

“ The pageantry of princes cannot
 “ equal the ornaments with which it is
 “ invested, nor the rich colouring that
 “ embellishes its wings.

“ The skies are the Butterfly's proper
 “ habitation, and the air its element;

" whilst Man comes into the world
 " naked, and often roves about without
 " habitation or shelter ; exposed, on one
 " hand, to the heat of the sun, and, on
 " the other, to the damps and exhalations
 " of the earth ; both alike enemies of
 " his happiness and existence :—a strong
 " proof, that, while this little animal is
 " raised to its greatest height, we are as
 " yet, in this world, only candidates for
 " perfection."

Your Aunt has been reading *Spence's*
Polymetis ; and she requests me to inclose
 this Extract from him upon the subject of
 the Butterfly.

" In the *Greek* language, the same
 " word is used indifferently for a Butter-
 " fly and the Soul. Old artists have re-
 " presented *Cupids* playing with Butter-
 " flies many different ways ; yet there is
 " scarce one of them for which I could
 " not

" not produce some parallel in their re-
 " presentations of *Cupid* and *Psyche*.—I
 " have seen an antique, in which *Cupid*
 " was drawn in a car by two *Psyches*;
 " and another, in which *Cupid* was
 " drawn by two Butterflies. . . .
 " . . A Butterfly is generally used by
 " the *Greek* artists, as an emblem for the
 " human soul. There might have been
 " a great deal of good sense (and, per-
 " haps, something more than good sense)
 " in the fixing on this emblem : at least,
 " nothing, I think, could point out the
 " survival and liberty of the Soul after
 " its separation from the body, in a
 " stronger and more argumentative man-
 " ner, than an animal, which, at first, is
 " a gross, heavy, creeping insect ; and
 " which, after dropping its slough, be-
 " comes (by an amazing change) a light,
 " airy,

“ airy, flying, free, and happy creature.”——

I was going to conclude—and here comes my Sister with a book in her hand; and she will have me add another Extract,——Oh! it is our friend Mr. JONES——I cannot refuse.

From a TRACT, entitled,
*The Metaphorical Use and Application of
 Sleep, in Scripture.*

“ The Egyptians seem to have applied
 “ the dormant state of some Insects to the
 “ survival of the Soul after the death of
 “ the body.

“ The transformation of the several
 “ species of Caterpillars through their
 “ intermediate state of sleep, to that of
 “ their splendid investiture in the spring,
 “ when they come forth from their winter
 “ quarters

“ quarters in the condition of Flies, is a
 “ fact well known to every observer of
 “ Nature.

“ It is worthy of admiration, that a
 “ creature, still preserving its identity,
 “ should pass from the baseness of the
 “ worm to the agility of a bird; one
 “ while crawling upon the ground, and
 “ presently traversing the air in a form
 “ which is dazzling to the eyes. But it
 “ is yet more remarkable, that, in the
 “ interval before this change is brought
 “ to pass, there should be a middle state
 “ of sleep, in which the bodily powers
 “ are suspended, while a principle of
 “ animation is continued.

“ It is thought the *Egyptians* had an
 “ eye to this middle state, and the change
 “ which follows it, in the configuration
 “ of their mummies, which resemble an
 “ *Eruca*,

"*Eruca*, or *Chrysalis*." See page 3, of the above Tract.

I was again going to conclude with love to both—and this Aunt has produced a passage from some other book!—My dear Sister, consider the frank—Well, it is but short.

"It cannot be disputed, that *Psyche* means the Soul.

"*Plutarch* tells us, that the word "*Psyche* denotes a certain species of Butterfly; and we read in another Author, that it signifies not only the Soul, but a small winged insect. We find on an ancient monument, a Butterfly coming out of the mouth of a man just dead. And there is a bas-relief, in which *Minerva* unites a Butterfly to the body of a man newly formed."

This

This must be owned to be a choice morsel: it is no matter where your Aunt met with it: and I will hasten to conclude, or I may have some more Extracts. Adieu! says

Your affectionate Mother,

Fawnton.

JEMIMA WORTHY.

LET-

L E T T E R X I X .

Mrs. MARSH to Master WORTHY.

MY DEAR,

JEMIMA is so anxious to supply you with amusement during your confinement with young *Plume*, that she seems distressed at her pen not keeping pace with her wish to oblige and gratify you and *Edmund*.

French, writing, accounts, reading, &c. &c. fill up much of her time ; and as she is very attentive to all her lessons, I am sorry she should have to regret the frustrating so laudable a scheme as the giving pleasure to you, who are employed in administering comfort. I act now in the capacity of your Sister's secretary.

E X.

E X T R A C T

FROM

P O L I C E O F N A T U R E.

“THE received opinion has been,
 “that vegetables were created for the
 “food and uses of animals; but, attend-
 “ing to the order of Nature, we disco-
 “ver, that animals were created upon
 “account of plants.

“Animals serve, in the first place, to
 “preserve a due proportion among vege-
 “tables: 2dly, to adorn the theatre of
 “Nature, and consume every thing su-
 “perfluous and useless: 3dly, to remove
 “all impurities arising from animal and
 “vegetable putridity: and, lastly, to
 “multiply and disseminate plants, and
 “serve them in many other respects.

“The

" The insects are the most numerous
 " tribe of the ministers of Nature: the
 " multitude of their species seems to vie
 " with that of plants.
 " . . . Every one of them has a sin-
 " gle plant assigned to it, which when it
 " cannot procure, there are a few others
 " which it preys upon by necessity to
 " preserve life. The Silkworm feeds
 " upon the leaf of the mulberry; but,
 " when it cannot be obtained in sufficient
 " plenty, it subsists upon the lettuce, and
 " the leaves of some trees: but the di-
 " minution of its beauty, size, and viva-
 " city, and the inferior quantity and qua-
 " lity of its silk, clearly point out, that
 " such food is by no means well adapted
 " to its nature.

" Of a particular plant, it often hap-
 " pens, that the leaves are the food of
 " one

" one insect ; the flowers, the seed-vessels,
 " and seed, of so many others.

" Every plant has its proper insect al-
 " lotted to it, to curb its luxuriancy, and
 " that it should not multiply to the ex-
 " clusion of others. . . .

" Scarce any beast will touch the Net-
 " tle : fifty different kinds of insects are
 " fed by it. . Without this multitude
 " of enemies, it would annihilate a great
 " number of plants. . . . The same
 " holds good in shrubs and timber trees,
 " especially those which produce spines,
 " and are easily disseminated. The
 " loftier plants are so much the more
 " preyed upon by insects, as they are
 " less exposed to the attacks of cattle :
 " and insects appear to be created to re-
 " strain the different species of vegetables
 " within their proper limits. . . .

" . . . Those

" . . . Those insects which subsist
 " upon plants have others set over them,
 " who devour their superfluous numbers.
 " Where the *Aphides* (or Leaf-lice)
 " find a plant sickly, they almost cover
 " the leaves and branches : here the
 " *Musca Ribesii*, *Pyrastris*, and others of
 " the same family, assemble, and deposit
 " their eggs, which are scarce hatched,
 " and acquire motion, before they to-
 " tally destroy the Leaf-lice : they are
 " likewise joined in this work by the
 " progeny of *Coccionella*, Golden Eye,
 " and the Leaf-louse *Ichneumon*."

I find my office of secretary so agree-
 able, now I am transcribing from this
 entertaining work, that I know not when
 I should stop, if I did not receive an
 intimation that dinner will be ready
 soon.

Thus

Thus it frequently happens—we begin a work in compliance with some duty—to oblige or serve a friend—and, in the progress, feel ourselves rewarded by the pleasure of the pursuit in which we are engaged.

It is with real reluctance I resign my pen. Believe

Your affectionate Aunt,

Fawnton.

ELIZ. MARSH.

LETTER XX.

Mrs. WORTHY *to her* SONS.

MY DEAR BOYS,

WHILST you perform the tender office of a comforter to your sick friend, we strive to make you partakers in our pleasures.

I want to know how it is, that *Gilbert* takes so little notice of our researches? Is he sily laying in a store, to join in the conversation at the time of the holidays, and surprise us with more knowledge of the subject than he supposes we can expect?

I am confident the dear little boy has a relish for such studies, and I think I have guessed why he is silent about them.

You

You always transmit our Letters to him? I would not but have him a sharer.

As we read, we find our work grow upon us. I wish to give you a tolerably regular idea of the *Police of Nature*; yet I long to stray to *Miracula Insectorum*. I long—but time and paper waste whilst we are talking.

“All things have their use—” so the wise tell us. It is the office of the learned to investigate the purposes of different parts of the creation, in order to convince those who could doubt the truth of the assertion.

Insects appear to the ignorant, at best, an useless part of the creation: therefore I am the more copious in my Extracts relative to them.

“Wherever any putrid matter is collected, certain insects are gathered together by it, whose brood devour it, and—

" and presently purify the place. Gnats
 " drop their eggs over impure and putrid
 " water ; the *Musca putris*, in mire ; the
 " *Musca domestica* (House Fly), in dung-
 " hills ; and others in dead carcases.
 " But lest these should multiply beyond
 " proper limits, some vigilant overseers
 " are appointed over them. The Spider
 " weaves innumerable webs upon every
 " bush : the Hornet Fly sucks their blood,
 " and the Dragon Fly catches them
 " wherever he flies."

I should exceed all bounds, were I to
 indulge in copying. Many kinds are
 enumerated. I must just mention one.
 An insect (*Phalæna Strobilella*) deposits
 its egg in the Fir-cone : the young Cater-
 pillars consume the cone and superfluous
 seed : the *Ichneumon Strobilella* lays its egg
 in the Caterpillar, which produces an
 insect that destroys it : but the *Ichneumon*
moderator,

moderator, a very small insect, enters into the cone, and lays its egg upon the Caterpillar of the *Ichneumon Strobilella*—which, being hatched, devour it.

I omit—I curtail—I regret that I cannot transcribe the whole.

I must just mention, that the *Carabi* (a species of Beetle) get by night upon the branches of the trees, and devour what Caterpillars they find.—An expedient for freeing fruit-trees from Caterpillars, is, to collect those insects, and place their eggs at the foot of the tree ;—“ which being hatched, will execute their office in the police of Nature, and devour them.”

It is shewn how birds, fishes, and beasts perform their office in this great “ Family of Nature :” but I must break off at present—only remarking with what regularity every thing seems to be conducted,

ducted, and in how orderly a manner those members of the creation who are guided by instinct proceed, each performing the office assigned him by Providence——And shall Man alone rebel?—shall he boast the gift of reason, and, by an abuse of it, degrade himself below the brutes?——He who does so, is reproached by the worm he treads on.

I have filled my paper, and can scarcely squeeze in love—from all, as well as

Your affectionate Mother,

JEMIMA WORTHY.

L E T T E R X X I.

Master WORTHY to Mrs WORTHY.

DEAR MAMA,

I WRITE in both (in all) our names, to thank you for your Letters; and pray offer our duty and thanks to my Aunt *Marsh*—duty to Papa and Uncle—and love to *Femima* and my Brothers.

I am happy to tell you, that *Plume* recovers very fast. I am sure you will approve our hiring a carriage for him to take the air in. We are both happy to spend our pocket-money in an act of kindness to our worthy young friend and assistant.

We are charmed with your Extracts—
and think we see why you dwell so much
upon

upon Insects—for two reasons: that the use of them was less obvious to a cursory observer, and because we meet with them so frequently. What joy will it be, to pursue these studies during the holidays! to converse *vivâ voce* with you all!

We are eager for some Extracts upon any Insects that you think particularly curious.

Dear Mama! your heart would melt to hear the grateful sense *Plume* expresses of our attention to him. *Edmund* was the best nurse, *I* think—for he supported the poor sufferer's spirits, and kept me cheerful. As to himself, he appeared to lose none of his vivacity—only to moderate or chastise it, so as to reduce what was *mirth* when we were all well and happy, to a constant, regular *cheerfulness*.

This sickness has endeared *Plume* to us more than I could have imagined; and
I think

I think it has increased his attachment to us.

Edmund's engaging behaviour has shewn him to me in so amiable a light, that I feel more affection towards him than I did before.

Thus does He who afflicts us, bring good out of evil.

We all offer duty and love.

I am, Dear Mama,

Your most tenderly affectionate Son,

JAMES WORTHY.

L E T T E R XXII.

Miss WORTHY *to her* BROTHERS.

DEAR BROTHERS,

WE are all very much rejoiced to hear that *Plume* is so much better. My Papa and Mama are very much pleased with you both, for hiring a carriage for him : they say, it is a sign that you regulate your expences properly, that you are able to do it, now the holidays are so near.—Uncle *Marsh* says, that you shew yourselves not lavish, by having money still ; and not selfish, that you bestow it so properly ; nor niggardly—for the expence of a chaise every day is a great article to a couple of boys.—Thus your actions are commented upon.

I have

I have been with the family to *Oakham*.
 —You know Mr. and Mrs. *Perfect* : but their daughter was very young when you were there : she is now a most charming young lady. She is some years older than I am, and much more womanly for her age ; so that many a young lady in her situation would have treated such a little girl as I am like a child ; have just asked whether I loved Dolls—and if I kept birds ? and taken care to shew, she was conscious of great condescension in taking any notice of me :——but Miss *Perfect* treated me with such civility and attention, that, if I had been a little princess, she could not have shewn me more ;—took me to see the house ; walked with me about the gardens ; carried me into the green-house, the menagerie, and every place where she thought I could meet with entertainment.——I shall never

ver forget her polite behaviour; and I hope I shall always remember to copy after her upon such an occasion.

As we returned in the coach, we talked of Miss *Perfect* all the way home. My Aunt says, her whole conduct is of a piece with this instance. "*Femima*," said she, "if you could live with Miss *Perfect*, you would need no precepts: "you would only have to follow her example, to make you perfectly amiable. "She is the only daughter of a gentleman whose estate is known to be large, "so that she must have heard she will "have a great fortune. Her person, you "see, is agreeable. Her education is "liberal, and she apt; so that her accomplishments are, at least, equal to "those of most ladies of her age. Her "Papa idolises her, and every person caresses and admires her—And
"you

" you see how very humble and modest
 " she is. That unassuming gentle air of
 " her's has such charms, that I am never
 " weary of seeing her. I was very de-
 " sirous that your Mama should carry
 " you to see so excellent a pattern." —
 My Mama calls me to my *French* lesson.

Adieu !

Fawnton.

JEMIMA WORTHY.

P. S. I inclose some Extracts, which
 my Aunt took for you.

(*EXTRACT inclosed.*)

" IN this low and despised rank of
 " living beings, I mean Insects, we dis-
 " cover the most perfect mechanism of
 " Nature. Small as they are, and with-
 " out the gift of speech, they proclaim
 " the wisdom of the Creator as clearly
 " as his other works. . . .

" *Lin-*

" *Linnaeus* demonstrated, that, of all
 " animals, Insects only were furnished
 " with *antennæ*, and that their skeleton
 " was nothing but an *epidermis*. Thus
 " these minute animals, clad in a com-
 " plete suit of armour, are preserved
 " from all external injuries. The strength
 " of the Elephant, in proportion to his
 " magnitude, is nothing in comparison
 " of one species of the *Scarabæus*.

" Consider an Insect through the won-
 " derful progress of its life—how differ-
 " ent is the first period of its being from
 " the second—and both from the parent
 " insect ! Its changes are an inexplicable
 " enigma to us. — We see a Caterpillar,
 " &c. &c. . . .

" . . Here is a large field open to
 " those who are curious. . He who
 " shall take delight in cultivating it, may
 " have his labours rewarded by the dis-
 " covery

“covery of a more elegant sweet than
“honey ; a more tenacious thread than
“that of the Silkworm ; a more glowing
“crimson than that of the Cochineal. .

“

“ These are the armies of
“the Most High, to punish disobedient
“nations : every band has its orders to
“fulfil, in the distribution of reward or
“punishment. If He decrees to chastise
“mankind, a single species of these
“animals are multiplied as the sand of
“the sea, and perform their divine
“commission. The grass of the field .

“ See page 339.

“ These are the effects of the
“Divine Power and Wisdom, to which
“we have consecrated our vacant hours :
“to these studies we ought to dedicate
“the time which we too frequently
“waste

“ waste in frivolous employments, in
 “ gaming, or other excesses. Let us cease
 “ to complain of the brevity of human
 “ life : we shorten it ourselves.”

“ The treasures and miracles of Nature
 “ are scattered with profusion on every
 “ side of us. The knowledge of these
 “ constitutes true wisdom ; and carries
 “ home our thoughts to our Creator,
 “ to ourselves, and the necessities of
 “ our natures.”

LET-

L E T T E R XXIII.

Mrs. WORTHY *to her Sons.*

MY DEARS,

I N reviewing the book from whence we have extracted passages, I am startled to see how many pages I have copied.— I mean only to excite your curiosity, that hereafter your leisure hours may be employed in a manner at least innocent, if not laudable. I look back and wonder at the hills I have passed—I look forward, and see *Alps* on *Alps* arise — There are yet three Dissertations upon Insects; and such entertaining particulars, that I know not how to refrain from proceeding in copying.

It is remarked, that Physicians may form a judgment of the nature of a plant, from the insects that feed upon it.

The three Papers are,

“ The *Flora* of Insects ” ——— “ On Noxious Insects ” ——— and “ *Miracula Insectorum* ” ——— besides another upon the *Silkworm*.

There are abundance of very entertaining particulars, and many directions how to guard against the injury we receive from various insects, in our persons, houses, clothes, gardens, fields, and animals. Happily, some of the destructive creatures are strangers in this country. You know the Dissertations were written by *Swedes*.

The account of the RHEN-DEER is very interesting: there is much of the
œconomy

æconomy of the poor wretched *Laplander* intermixed.

I begin to think something may have happened to throw poor *Plume* back ; for it is some time now since we have heard from you. I hope you are all well.

All the family send love to you and your Brothers.

Believe me, my Dears,

Your affectionate Mother,

J. WORTHY.

LETTER XXIV.

GILBERT *to* Mrs. WORTHY.

DEAR MAMA,

I HOPE I shall never attempt to deceive you. I hope I never shall have any temptation to do it. This harmless piece of deceit that you have detected, you will not blame; but, I dare say, will keep my secret which you have discovered. — Mama! how could you penetrate into my design? — Pray do not tell even my Sister. I have taken great pains to learn some Natural History against we meet, that I may furnish my share: but I cannot meet with any books that are thoroughly suited to my age.

We

(77)

We break up to-morrow three weeks.
I am not fearful that you should forget
the time, Mama. I know you will re-
joice to see

Your affectionate and dutiful Son,

GILBERT WORTHY.

P. S. My duty and love.

L E T T E R XXV.

GILBERT *to his* Brother WALTER.

DEAR BROTHER,

I SUPPOSE you will go to school in a year : now, I want to tell you a story of a little boy, by way of caution.

First, I must tell you, that, in all schools, you will meet with some naughty boys—aye, very naughty boys!—such as will shock you at first, as they did *Tom Pliant*.

When *Tom* came to school, he was a very good boy. He never had missed saying his prayers attentively, every night and morning ; had been used to do every thing that he was desired to do, directly ;
and

and to consider always what his *Mama* would have him do, and observe carefully to do it, the same as if he had been bidden——Such was *Tom Pliant* when he came first; and now—I grieve to say it—he is a very naughty boy; he has caught all the faults of all his school-fellows; he glories in doing *as others do*. If they rob orchards, so does he: if they deny it, so does he: if they affront the passers, so does he: if they fight and quarrel, so does he.

I should be loth to tell you all his naughtiness—and you would shudder to hear it.

Oh, my dear *Walter*! you little think how bad some boys are. You are happy in being with kind parents, who watch over you all, and correct every evil disposition. You will be frightened to see how wicked boys are in the world; but

I hope you will not catch their wickedness, as *Tom Pliant* has done.

How unhappy will his Mama be, to see her gentle, obedient, amiable child so changed!—May my dear Mama never have such a mortification!

I wonder where you will be at school. If you come hither, pray have no acquaintance with *Tom Pliant*,

My love and duty. Believe me,

Dear *Walter*,

Your affectionate Brother,

GILBERT WORTHY.

LET-

LETTER XXVI.

EDMUND WORTHY to Miss
WORTHY.

DEAR SISTER,

I HAVE not written to you lately;
but no apology is requisite for the
omission: poor *Plume's* illness was a suf-
ficient excuse.

We have a new scholar just come. He
is the son of a Bird-catcher, and he
amazes us all with accounts of the me-
thods of taking the small birds. I some-
times suspect he has a mind to impose
upon our credulity.

I am entertained with the description;
but I should like to be certain, whether

I may venture to believe all that he tells me.

One thing I wish may not be true, for the sake of humanity ; and that is, the practice of *sweating* the poor birds which the bird-catchers stile *Call-birds*, and train to inveigle the wild ones to captivity, to make them moult before the usual time, which gives them a superiority to those which are still moulting. It is so cruel, that you will shudder to hear the method. The poor bird is put into a close box, under two or three folds of blankets, the dung left in the cage to increase the heat. Thus immured in stench and heat, it is only examined about once in a week, to have fresh water. The air is so bad, that they take very little food during a month, for so long this terrible confinement lasts. You will readily believe that they frequently

quently die under this operation ; so that one of these birds (called a *stopped* bird) is valued at a high price.

It seems, the beauty of a stopped bird, both in form and plumage, is superior to that of the rest, as well as his note.

The boy assures me, that there seems to be a kind of malicious joy in the Call-bird, in enticing the wild ones into the same state of captivity. But that is idle : poor little thing ! he is only pleased to see some of his brethren become his companions, I suppose.

The Call-birds have a peculiar note, with which they invite the wild ones—a short jerk, which may be heard at a great distance,

The Bird-catchers will lay wagers upon their respective Call-birds, which can jerk the longest—which is determined by inch of candle ; and a Linnet has been

known to persevere till it has swooned from the perch. My Brother says, that *Pliny* mentions something similar of the Nightingale. It seems, there is a certainty, from circumstances, that the Call-birds' thus jerking face to face, is an instance of contention for superiority of song.

This reminds me of a most pleasing remark I met with lately, in an author who treats of Natural History—That young birds practise their songs as learners: it seems, the Bird-catchers call it *recording*. I will give you an account of this, in better words than I could find:

“ This first essay does not seem to
 “ have the least rudiments of the future
 “ song; but as the bird grows older and
 “ stronger, one may begin to perceive
 “ what the nestling is aiming at. Whilst
 “ the scholar is thus endeavouring to form
 “ his

" his song, when he is once sure of a
 " passage, he commonly raises his tone,
 " which he drops again when he is not
 " equal to what he is attempting; just as
 " a singer raises his voice, when he not
 " only recollects certain parts of a tune
 " with precision, but knows that he can
 " certainly execute them. What the
 " nestling is not thus thoroughly master
 " of, he hurries over, lowering his tone,
 " as if he did not wish to be heard, and
 " could not yet satisfy himself."

We are told, that this recording lasts
 ten or eleven months; which makes it
 extraordinary, that no poet has remarked
 it, which I am assured is the case in
England. But our Usher says, that
Pliny, in his account of the Nightin-
 gale, describes a learner:

" The younger sort meditate, and re-
 " ceive lessons for their imitation. The
 " scholar

"scholar listens with great attention, and
 "repeats ; and each is silent by turns.
 "An attempt to mend in a corrected pas-
 "sage may be perceived, and a kind of
 "reprehension in the teacher."

This he kindly gave me, and allowed
 me to translate it as my lesson of the day ;
 corrected it, and so indulged my wish to
 gratify your curiosity.

Who says the study of language is
 dull? does it not enable us to oblige our
 Sister? Whatever does that, is highly
 pleasing to, my dear *Femima*,

Your affectionate Brother,

EDMUND WORTHY.

LET-

LETTER XXVII.

Miss WORTHY, *in Return.*

DEAR EDMUND,

LET the *Italians* boast of their *Beccoficos*—let the *Epicure* expatiate in praise of *Ortolans*—I challenge them to enjoy half the pleasure in their expensive dishes, that your little Birds afforded me. I thank you for my regale, to which I shall often return with an increasing relish.

I believe *Philips* (but I *hear little*, and *read no poetry*) talks of the *Nightingales* contending in song; and I remember (wherever I met with the notion) that it was treated by the person of whom I
made

made some enquiry, as a fable : so, perhaps, are many truths.

I always forget to ask my Papa, whether the circumstance so often alluded to, of the Pelican feeding her young with her blood, might not arise from that of many birds carrying the provision to their nests in their crops, and feeding their nestlings with it from thence. I think that the Pelican carries water in a large pouch, that is wrinkled into a small compass under its bill, when empty.

I chanced to hear, the other day, that a learned Gentleman has lately spent thirty-five pages upon the dispute relating to the *song* of the Swan. Now another author has lately asserted with great confidence, that, in some parts of *Scotland*, the wild Swans do actually sing ; and, to prove it, relates, that there is a song
with

with a sort of burden imitating the note of the Swan. Thus are we kept in doubt between truth and falsehood. But even fables have their rise from some foundation ; and I should be entertained with the knowledge of their rise.

How happy am I, to have a whole family instructing me ! It is a peculiar pleasure to be invited by my Brothers to partake of the learning which is shut from us, who are unacquainted with the dead languages—as I think you call them.

My Aunt is very averse to poetry, for very young people. She says, that she longs to read to us *Thomson's* " Seasons," in prose ; but she scruples learning them in such a way : sometimes she takes up the book with that intention—reads a little

tle while to herself—and then says,
 “ No—it will not do.”

The approach of the holidays is even made more agreeable to me than ever. I look forward, not merely for *play-fellows*—not only for pleasing *companions*—not only for affectionate *brothers*—but for most agreeable *tutors*.

I suspect that *Gilbert* is hoarding his science till we meet—and then intends to pour it out; for he used to enter into the talk—and why not correspond upon the subjects that we have been all so busy about?

Suppose we were to agree to have a time set apart, regularly, every day, for our lectures? I mean, a portion of the time which we have at our own disposal. I am impatient for our Holiday Discourses.

courses. I hope *Plume* is well enough to assist ; for I begin to look forward for the pleasure of reading our present conversations to dear little *Sally*, who is now too young to enter into them. Indeed, *Bernard* has been rather thrown out by the language of some of your Extracts.

Sometimes my Aunt reads to us in *Goldsmith's* " Natural History ;" and she says, that she alters the language as she reads : we never have the books ourselves.

We have just met with *Withering's* " Botany," which is said to be suited to young Ladies ; and I want to study that.

How surprising it is, that people should complain of their time hanging upon their hands ! Have they eyes ? have they ears ?—I am sure they have not sense—But fie !—I know my dear Mama would
reprove

reprove me—and I wish the passage expunged —Who am I, that I should censure others?—I am a fortunate girl, surrounded by kind friends, who incessantly instil instruction—who admonish me perpetually, “Employ yourself—do something—be not idle.”—I am, by this mean, a tolerably sensible girl: but else, who knows what I should have been? Probably, without all these advantages, I might have been greatly inferior to the most trifling of those girls whom I was speaking of with derision; and they would, very likely, have had too much goodness (exchanging situations) to have spoken contemptuously of me.—Thus I lecture myself, my best adviser being absent. I blush for my arrogance, and I wish to recal the insolent expression.

We

(93)

We leave *Fawnton* very soon ; and it
will be but a little while before I shall
hope to meet you. What joy to,

My dear Brothers,

Your affectionate Sister,

Fawnton.

JEMIMA WORTHY.

LET-

LETTER XXVIII.

WALTER WORTHY *to his*
BROTHERS.

DEAR BROTHERS,

WE have been reading an account of the manner of Fowling in *Norway*. I think you know the law respecting those who break their necks, or lose their lives, in the employment. I have a print of the men climbing by the help of poles, and assisting each other. I will shew it to you when we meet.

Papa, Mama, *Jemima*, and *Bernard* are gone from *Fawnton*.

If I do not come to you in the time of the holidays, I hope you will not suffer
me

me to lose your conversations upon Natural History : you design to write them, I think ; and pray let me see them.

I met yesterday with a Lady of very good character, who did not seem to deal in wonders, to make people stare, and she declared, that a *Newfoundland* Dog, which her husband had, was web-footed. Pray ask my Papa, if he ever heard of such a thing ?—My Uncle, with all his knowledge, knows nothing of Natural History.

My Aunt says, that she wants to write to you : so I conclude,

Dear Brothers,

Yours affectionately,

WALTER WORTHY.

Mrs.

Mrs. MARSH, in Continuation.

Dear little *Walter* has resigned his paper to me quite readily. His disposition is so sweet and engaging, that I believe I am the more frightened at the thought of his mixing with boys who will set him a bad example. You cannot conceive what his parents would suffer, to see him fall off from the amiable conduct for which they are now so fond of him. When you are *fathers*, you will know.

If he come to you, your example and advice will be of use, I hope.

How charming will be your meetings in the holidays! I shall long to be behind a screen, or a tree, to hear your harangues.

Walter is very assiduous to fit himself to bear a part whenever he has an opportunity ;

tunity ; and if he wanted a spur to exert himself in the study of *Latin*, the knowledge that it is so much the language of science would supply it.

He never needs any other motive to induce him to apply closely, than the knowledge that we wish him to do it.

A dutiful child should not require a reason—but trust that his parent or friend has good ones, and obey implicitly.

I write in great haste, or I could not write at all.

Your Uncle sends love.

We wish you a happy meeting, and pleasant holidays. Believe me,

Dear Boys,

Your affectionate Aunt,

ELIZ. MARSH.

[Another Vacation is supposed to have
passed, and the following LETTERS to
be written after the Boys are returned
to School.]

LETTER XXIX.

JAMES WORTHY *to his* SISTER.

DEAR SISTER,

THERE needed nothing to increase my affection for you, my wish to be with you : they were sufficiently strong before. However, I find that the delight with which you listen to my tales of natural wonders, does really increase them ; at least, makes me more frequently feel the want of you at my elbow.

Yesterday I wished for you very much, to help me to admire a collection of dried Insects ; to help to wonder at the account which I heard of several curious ones, both foreign and native.

I wish I could recollect half the things that I heard and saw, so as to venture to relate them to you.

However, you shall be partaker of our mirth at a ridiculous incident, that arose from finding the nest of the LEAF-CUTTING BEE; of which you may recollect that I gave you a few particulars, when we were together in the holidays.

The *Nest* is called *Centunculus*; the Bee, *Apis Centuncularis*. You must have observed the green leaves of rose-buds to have round pieces cut out of them, as if it were done with a pair of scissars. This is the work of the Leaf-cutting Bee. I once found one rolled like a bale of cloth; and I often regret that I did not place it in the earth, and watch the coming out of the young creature.

But

But I have begun my story at the wrong end. I should have told you, that a great Naturalist gives an account of a Gardener, who, finding some of these, believed them to be some spell left there by witches ; and, consulting some neighbours, who were as ignorant as himself, was advised to carry them to the Minister of his parish. He, as weak as the rest, persuaded the Gardener to carry them to *Paris*, for his Master to see them—who himself could not explain the matter—but was so happy as to meet with a Naturalist, who assured them, there was no harm to be apprehended, for that a poor innocent Bee was the witch that had formed the charm.

As I said before, I began my story at the wrong end : but here it is—turn it which way you will. Allow me, however, at this end of my Letter, as well

as the first, to tell you, that I always wish you to be a partaker in all my pleasures ; which I do but half enjoy, when I reflect how much satisfaction it would give you to be present.

I have not leisure to write so much as I could wish : whenever I can write, you may command the pen of,

My dear Sister,

Your affectionate Brother,

JAMES WORTHY.

L E T.

L E T T E R X X X .

From the Same to the Same.

DEAR SISTER,

YOU make me very happy, by assuring me that my Letter gave you so much satisfaction: and do you really think that you could not have had more pleasure in seeing all the curiosities in Mr. *Papilio's* Museum? You rejoice me greatly; for I *have* the power, I find, of making you a sharer in my gratifications.

I did not tell you, that Master *Papilio* is one of my school-fellows: he it was who introduced me to see his Papa's curiosities; and he promises me that I shall go again; nay, he says, "Go often."—Do you not jump at my promised pleasure?

Master

Master *Papilio* is a very sensible boy, and exceedingly good tempered: we are quite intimate. He is to lend me some books upon Insects. I may say (as little *Henry* sometimes does), "There's for you!" for it will be productive of entertainment for you, if I can make my pen obey my wishes.

One day Master *Heavy* was bestowing some very dull raillery upon *Papilio* and myself, for our love of Insects. I will tell you how my friend addressed him:

"What is more worthy of admiration than an Insect? only it is small—and therefore you esteem it trifling."

Heavy blundered out a foolish jest, and *Papilio* went on:

"An Insect is at least as wonderful as a larger animal, and, perhaps, even more curious. You admire the horns of the Stag. Now, there is a foreign Beetle,

“ Beetle, whose horns are more beautiful,
“ with the addition of this curious cir-
• “ cumstance, that he can either draw
“ them out or push them back: he is
“ called the Stag Beetle.”

Here *Heavy* cried “ Pshaw ! ” and
turned upon his heel.

I requested him to proceed, as if the
object of his harangue were still present,
• and relate to a more willing ear the won-
ders of the Insect tribe.

Papilio, smiling, went on thus :

“ The *lamellæ* of the horns of the
“ *Scarabæus Fullonis* open and shut like
“ the leaves of a book.

“ There is an Insect named *Monoculus*,
“ of which the horns are branched like
“ the fingers of a hand, and expanded
“ like arms ; and by their assistance the
“ animal performs its motions in the
“ water.”

I could

"I could have listened all day; but, alas! the bell summoned us to attend our dinner; a more necessary, but less pleasing repast, than that from which it warned us away.

Tell me how you relish my friend *Papilio*. Believe me

Your affectionate Brother,

JAMES WORTHY.

LET-

LETTER XXXI.

From the Same to the Same.

DEAR SISTER,

I AM as much surpris'd as you can be at my friend *Papilio's* degree of knowledge. He has been actuated from his earliest infancy by his Papa, who is the first Naturalist in *Europe*, in his way.

I rejoice that they came to reside in *England*, and exceedingly rejoice, that the son came to this school.

Papilio and I spend all our leisure hours together: he is obliging beyond conception. Would you think it? he found that I sent you an account of what I picked up from him, and he has now brought me some particulars of other
curious

curious Insects, that I may inclose them for your entertainment.

“ The *Curculio* has a long beak, which
“ is as hard as horn, and is furnished
“ with a small mouth at the extremity.

“ The tongue of the *Papilio* is rolled
“ up in the form of a spiral.

“ The tongue of the Gnat pricks like
“ a needle, and sucks like a pump.

“ The Dragon Fly has numerous mandibles, which are naked, without any
“ covering of flesh. These are more destructive among Insects, than Lions in
“ their deserts, or Sharks in the ocean.
“ This fierce animal seizes every Insect
“ which passes by it, and breaks its legs
“ at the first bite.

“ The *Phryganea*, inhabiting the water
“ among its voracious enemies the Fish,
“ covers itself over with little straws,
“ sand, and fragments of leaves, that it
“ may

" may lie concealed. If you saw it
 " under water, you would be induced to
 " think it a small piece of the twig of a
 " tree—not a future Fly.

" The *Cassida Merdigera* and the *Chry-*
 " *somela* with compressed neck, cover
 " themselves entirely with dung, that
 " they may not be discovered by birds.

" The *Cimex personata* covers itself over
 " with all kinds of rubbish, and, to con-
 " ceal itself the better, disguises its step;
 " and, though a beautiful Insect, exerts
 " all its little ability to resemble the most
 " deformed of Spiders.

" There are many *Curculiones*, which
 " deposit their eggs under the cutaneous
 " bark of the Blite, &c. which, trans-
 " formed into worms, make their way
 " between the upper and lower membrane
 " of the leaf. These burrow in vegeta-
 " bles, like Moles in the earth, lest they
 " should

" should be exposed to injuries from the
" air, or be the prey of birds.

" The case is the same in the *Indian*
" *Creeping Leaf*. The worm called the
" *Foliaceous Cicada*, and *Gryllus Siccifo-*
" *lius*, included in the leaves, put out
" their feet from certain perforations,
" and, under this cover, move from
" place to place with security, with their
" houses upon their back."

I am

Your affectionate Brother,

JAMES WORTHY

LET-

LETTER XXXII.

From the Same to the Same.

DEAR SISTER,

I WAS well aware that *English* names would be more agreeable to you ; but I could not always obtain the knowledge of them, even where they had such.

But you have your oracle at hand ; and if his knowledge should fail, he will probably consult *Berkenhout*.

Master *Papilio* has lent me *Ray's* " History of Insects ; " and I can give you a very entertaining account of one called the *Sphex hirta* ; an *ichneumon*, which the author observed in the month of *June*.

Thus he says :

“ I observed it dragging a green Cater-
 “ pillar three times its own size. When
 “ it had brought it about five yards, it
 “ laid it down near the mouth of a little
 “ burrow it had made in the ground ;
 “ then removing a little ball of earth
 “ with which it had covered the orifice, it
 “ first went down, and, after staying a
 “ short time, returned, and, seizing the
 “ Caterpillar again, drew it down with
 “ him ; then leaving it there, came up,
 “ and, taking some small globules of
 “ earth, rolled them one by one into the
 “ burrow, scraping the dust in by inter-
 “ vals with its fore-feet, in the manner of
 “ a dog ; thus alternately rolling in pieces
 “ of earth, and scraping in dust, till the
 “ hole was full ; sometimes going down,
 “ as it seemed to me, to press down the
 “ earth ; and once or twice flying to a
 “ fir-tree which grew near—perhaps, to
 “ get

" get turpentine to glue it down and
 " make it firm. The hole being filled,
 " and equalled with the surface of the
 " earth, that its entrance might not be
 " discovered, it took two fir-leaves which
 " were near, and laid them by the
 " mouth—most probably, to mark the
 " place."

I think you will be very attentive,
 next *June*, trying if you cannot meet
 with this *Ichneumon*, though he has such
 a hard name.

Is it not extraordinary, that, amongst
 the number of boys in this school, we
 meet with none that seem to have any
 relish for these pursuits? I pity them;
 for I find such a constant fund of enter-
 tainment, that I wish my friends to have
 a taste for the same kind of study.

I forgot to tell you, that I have had
 the luck to find a little treasure. I was
 pleased

pleased with it, but ignorant what it was till my friend *Papilio* explained to me, that it is the cast skin of the Mole Cricket. There is an account of it in *Nature Delineated*, where it is called likewise the *Grillo Talpa*.

This little creature burrows in the earth, like a Mole, and does a great deal of harm in the kitchen-garden.

I long to shew you his great coat: such it appears. I wish you to share in all the pleasure of,

My dear Sister,

Your affectionate Brother,

JAMES WORTHY.

